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# 4 Play assessment tools and methodologies: the view of practitioners

## 4.1 Introduction

Garvey (1990) defined play as "a range of voluntary, intrinsically motivated activities normally associated with recreational pleasure and enjoyment". Thus, play includes all kinds of activities performed with ludic intention and characterized by pleasure, self-direction, and intrinsic drive. From this perspective, 'play-like' activities are those made in ludic contexts, with a ludic mood andinvolving ludic tools (as toys and games), but driven byeducational or rehabilitative goals (Besio, 2017; Bulgarelli & Bianquin, 2017; Visalberghi, 1958).

Professionals working in the field of "play and children with disabilities" may focus their activities on "play for the sake of play" (Besio, 2017): if this is the case, play is the core objective and the professional activity is meant to make play happen or improve. Alongside, play is very often used to convey interventions to improve children's abilities other than play, as cognitive abilities, social or emotional competence, language skills, etc.: if this is the case, then the professional activities and interventions are play-based. This framework is also mirrored in the tools and methodologies to evaluate play, leading to play or play-based assessment (for a wider discussion, see Ray-Kaeser, Châtelain, Kindler & Schneider, 2018). Play assessment is meant to evaluate play abilities, preferences, type of play, etc.; play-based assessment relies on play to measure children's cognitive, emotional, social, or affective competences.

Play or play-based assessment is a task of professionals in several fields: psychology, occupational therapy, mainstream and special education, speech and language therapy, rehabilitation, child psychiatry, research, etc. Many of the tools that are available have been developed in the occupational therapy, psychology and psychiatry fields and can be used by different practitioners (Bulgarelli, Bianquin, Caprino, Molina & Ray-Kaeser, 2018).

To our knowledge, the view of professionals on the evaluation of play and on the instruments and methodologies to evaluate play has not been investigated yet. This topic seems important: do professionals know and use the tools that are currently available? Do they trust them? Which features make a tool interesting for the practitioners working in the field of play and children with disabilities? A pilot study to start and addressing these questions has been developed.

## 4.2 Objective of the study

The study was framed in the COST Action TD1309 "LUDI – Play for Children with Disabilities", contributing to two main tasks of the Action: a) collecting and systematizing the existing competences and skills in the field of play for children with disabilities; and b) disseminating the best practices emerging from the joint effort of researchers, practitioners and users (Besio, Bulgarelli, Stancheva-Popkostadinova, 2017). The study has been coordinated by the LUDI Working Group 1 dedicated to the theme "Children's play in relation to the types of disabilities"[6].

The main goal of the study was to collect information from practitioners from different countries on their experiences of using existing methodologies and tools for the evaluation of play. To this end, a survey has been organized, to collect data from all those professional groups involved in play and children with disabilities.

## 4.3 Method

### 4.3.1 The questionnaire

The questionnaire "Evaluation of play in the professional practice" was developed in English by Serenella Besio, Daniela Bulgarelli and Vaska Stancheva-Popkostadinova for the purpose of the study.

It consists of two parts: the first one includes four questions addressing general information about the person who filled the questionnaire (profession, years of experience in the field of play, current occupation and place of working, location); the second part includes six specific questions concerning experience in play evaluation/assessment:

- purpose of play in the professional practice;
- experience on play evaluation;
- most useful methods for the evaluation of play, based on the practical experience;
- assessment instruments and methodologies and reasons for choosing them;
- recommendations for practice.

The questionnaire was translated into Albanian, Bulgarian, French, Italian, Macedonian, Romanian and Serbian languages by mother-tongue researchers and professionals who are part of the LUDI network.

**6** For more details, see: http://www.cost.eu/COST_Actions/tdp/TD1309 and https://www.ludi-network.eu/

### 4.3.2 Data collection

The study was conducted between July 2016 and February 2017. The questionnaires were distributed among the LUDI members, who shared them with professionals in their country. The answers to the open questions were translated by the same LUDI members who took care of the questionnaire translation.

### 4.3.3 Participants

One-hundred-seven participants from 14 countries took part in the survey (see Table 4.1): Australia (AUS), Bulgaria (BG), Former Yugoslav Republic of Macedonia (MK), Germany (D), Greece (GR), Israel (IL), Italy (I), Malta (M), Netherlands (NL), Romania (RO), Serbia (SRB), Sweden (S), Switzerland (CH) and United Kingdom (GB).

Twelve different occupations were represented: coordinator of play space (Coo), counsellor (Cou), kinesiotherapist (K), occupational therapist (OT), psychologist (Psy), neuropsychiatrist and child psychiatrist (Psyc), researcher (R), special educators (SE), speech and language pathologist (SLP) and therapist (SLT), social pedagogue (SP) and teachers (T)(see Table 4.1).

**Table 4.1.** Participants: professional group by country

| Profession | Country | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | AUS | BG | CH | D | GB | GR | I | IL | M | MK | NL | RO | S | SRB | Tot |
| Coordinator of play space | | | | | | | 1 | | | | | | | | 1 |
| Counsellor | | | | | 1 | | | | | | | | | | 1 |
| Kinesiotherapist | | | | | | | | | | | | 1 | | | 1 |
| Occupational Therapist | | | 6 | 1 | | | | 16 | | | 4 | 6 | | | 33 |
| Psychologist | | 8 | | | | | 2 | 1 | | | | 7 | | 2 | 20 |
| Neuro/psychiatrist | | | | | | | | | | | | 1 | | 1 | 2 |
| Researcher | 1 | | | | | 1 | | | | | | | 1 | | 3 |
| Special Educator | | 3 | | | | | | | | 6 | | | | 4 | 13 |
| Speech Language Pathologist | | | | | | | | 1 | 1 | | | | | | 2 |
| Speech Language Therapist | | 4 | | | | 4 | | 1 | | | | | | 1 | 10 |
| Social Pedagogue | | | | | | | | | | | | 5 | | | 5 |
| Teacher | | | | | | 6 | 4 | | | 1 | | 5 | | | 16 |
| Total | 1 | 15 | 6 | 1 | 1 | 11 | 7 | 19 | 1 | 7 | 4 | 25 | 1 | 8 | 107 |

All participants had experience in working with children with disabilities and used play in their practice. Professional experience in the field of play of the participants ranged from 2 months up to 35 years (M = 11.52 years, SD = 8.18 years). The duration of professional experience in the field of play has been grouped as follow: < 5 years, 5-10 years, 10-15 years, 15-20 years, > 20 years (see Figure 4.1).

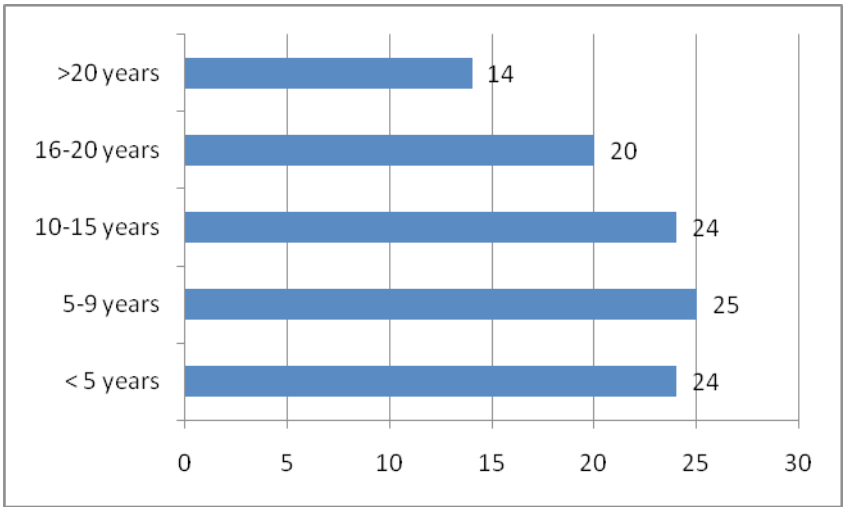


**Figure 4.1.** Respondents' professional experience in the field of play

## 4.4 Results and discussion

The multiple choice Question #5 was the first of six specific questions concerning experience in play evaluation and assessment: "When you use play in your professional activities with children, you use it:

a) As a background for making educational/rehabilitation activities (your main objectives are in education/rehabilitation, play is the mean to reach them);
b) Because it is the objective of your professional activity: you work to make play happen or improve;
c) As the best activity to assess the child's competence/ability and/or developmental stage;
d) As a therapeutic methodology."

One-hundred-four persons replied to this question (1 occupational therapist with 6 year of working experience, and 2 teachers with 13 and 21 years of working experience have not answered); each participant could choose more than one option. Table 4.2 reports the answers to Question #5 classified by professional group.

**Table 4.2.** Use of play by professional group

| | | Question 5: "In your professional activities, you use play" | | | |
|---|---|---|---|---|---|
| **Profession** | **N** | **a) as background for making activities** | **b) because it is the objective of my activity** | **c) to assess child's competences** | **d) as a therapeutic methodology** |
| Coordinator of play space | 1 | | 1 | | |
| Counsellor | 1 | 1 | | | |
| Kinesiotherapist | 1 | 1 | | | 1 |
| Occupational Therapist | 33 | 21 | 14 | 14 | 15 |
| Psychologist | 20 | 14 | 4 | 6 | 10 |
| Neuro/psychiatrist | 2 | 1 | 0 | 1 | 1 |
| Researcher | 3 | 1 | 1 | 2 | |
| Special Educator | 13 | 11 | 7 | 9 | 11 |
| Speech and Language Pathologist | 2 | 2 | | 2 | 1 |
| Speech and Language Therapist | 10 | 6 | 2 | 7 | 2 |
| Social Pedagogue | 5 | 5 | 4 | | 3 |
| Teacher | 16 | 6 | 2 | 5 | 5 |
| Total | 107 | 69 | 35 | 46 | 49 |

According to the theoretical framework proposed in the Section 1, the answers a), c) and d) correspond to the use of play to pursue therapeutic, rehabilitative or evaluation objectives. Therefore, the great majority of the respondents had experience in play-like activities, and only 35 reported play as being the core of the professional activity.

Question #6 was: "Do you evaluate play in your current practice with children?". The evaluation of play was used in the practice of 99 respondents: these professionals had been working in the field of play for an average time of 11.83 years (SD = 8.23; min = 2 months, max = 35 years). Eight respondents (2 psychologists, 3 occupational therapists, 2 teachers and 1 special educator) did not evaluate play; they had been working in the field of play for an average time of 6.98 years (SD = 6.68, min = 4 months, max = 20 years).

Question #7 was: "In your practice, what do you find most useful for the evaluation of play?

a) Standardized tool
b) Observational tool
c) Direct observation
d) Questionnaire
e) Other"

One-hundred-seven persons replied to this question; each participant could choose more than one option (see Figure 4.2).

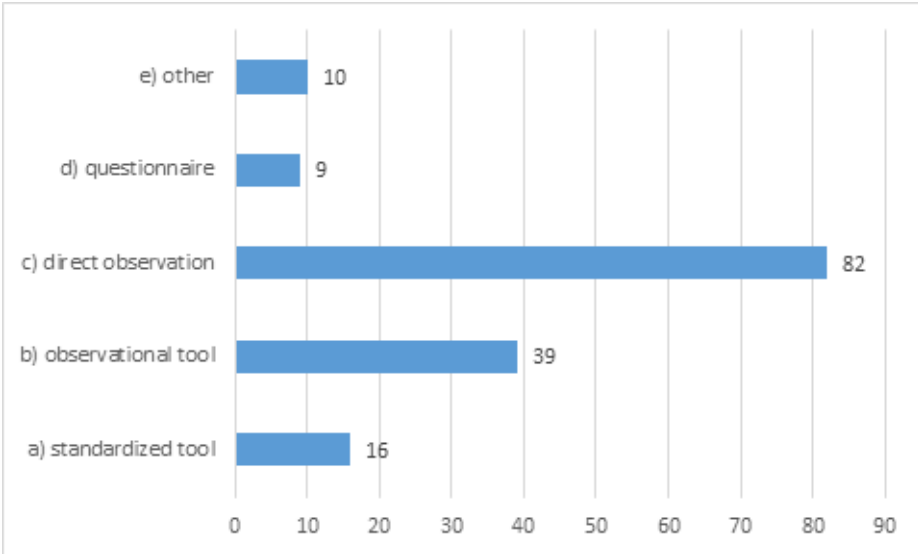


**Figure 4.2.** Most useful tools and methodologies for the evaluation of play (Question #7)

When selecting "other", respondents indicated a) some tools they usually used; b) the use of indirect observation or interviews with parents and teachers; c) some specific therapeutic tool such as the analysis of Transference and Countertransference; and d) the use of means to play as educational computer game or dolls for hands. Table 4.3 reports the answers to Question #7 by profession.

Among the participants, the methodology considered most useful for play evaluation was direct observation or observational tools. This was the case across all professional groups. Standardized tools and questionnaires were considered the less useful by this sample of professionals.

Question #8 was: "Which assessment instruments and/or methodology do you use for the evaluation of play (please, write the full name and authors of the tool – the tool can be standardized or not)?". Fifty-eight participants responded to this question

(see Table 4); their average time of work experience was 10.65 years (SD = 8.51; min = 2 months, max = 35 years). Fifty-one participants did not answer (average time of work experience = 12.56 years, SD = 7.74; min = 4 months, max = 33 years). The respondents could report up to a maximum of three tools/methodologies: 34 indicated one, 15 indicated two and 9 indicated three tools/methodologies.

**Table 4.3.** Most useful tools and methodologies for the evaluation of play by professional group

| | | Question 7: "What do you find most useful for the evaluation of play?" | | | | |
|---|---|---|---|---|---|---|
| **Profession** | **N** | **a) standardized tool** | **b) observational tool** | **c) direct observation** | **d) questionnaire** | **e) other** |
| Coordinator of play space | 1 | | 1 | 1 | | |
| Counsellor | 1 | | | 1 | | 1 |
| Kinesiotherapist | 1 | | | 1 | | |
| Occupational Therapist | 33 | 4 | 12 | 25 | 3 | 3 |
| Psychologist | 20 | 6 | 8 | 14 | 1 | 2 |
| Neuro/psychiatrist | 2 | | 1 | 1 | | |
| Researcher | 3 | 1 | 3 | 3 | 1 | |
| Special Educator | 13 | 2 | 7 | 9 | 1 | 1 |
| Speech and Language Pathologist | 2 | 1 | 1 | 2 | 1 | |
| Speech and Language Therapist | 10 | | 2 | 9 | 1 | 1 |
| Social Pedagogue | 5 | | | 5 | | |
| Teacher | 16 | | 4 | 11 | 1 | 2 |
| Total | 107 | 14 | 39 | 82 | 9 | 10 |

Question #9 was: "Why do you choose and use this instrument/methodology? Which characteristics of this tool/methodology make you adopt and use it? Please, explain for each tool". All the given answers have been classified into 2 categories: tools, i.e. instruments listing a representative sample of directly observable behaviours that are related to the competence evaluated by the tool itself (Molina & Muntean, 2018); and methodologies, i.e. theoretical framework organizing the use of tools and activities to assess a competence or, more generally, activities that cannot be considered tools according to the previous definition.

**Table 4.4.** Respondents to Question #8 by professional group

| Profession | Respondent | Non respondent | Total |
|---|---|---|---|
| Coordinator of play space | 1 | | 1 |
| Counsellor | 1 | | 1 |
| Kinesiotherapist | | 1 | 1 |
| Occupational Therapist | 19 | 14 | 33 |
| Psychologist | 9 | 11 | 20 |
| Neuro/psychiatrist | 1 | 1 | 2 |
| Researcher | 3 | | 3 |
| Special Educator | 9 | 4 | 13 |
| Speech and Language Pathologist | 1 | 1 | 2 |
| Speech and Language Therapist | 5 | 5 | 10 |
| Social Pedagogue | | 5 | 5 |
| Teacher | 9 | 7 | 16 |
| Total | 58 | 49 | 107 |

Table 4.5 summarizes the responses about tools, and Table 4.6 contains the responses about methodologies. The tables report excerpts of the literal responses.

As reported in Table 4.5, 53 respondents referred to 38 different tools to evaluate play; 31 of them reported about 17 different tools that are specifically meant to assess play or tools that are partly dedicated to the assessment of play. Several features make these tools interesting for the professionals: their reliability; presence of well-defined criteria of play; reference to developmental age, a valuable information to include in reports for health insurances or health systems, or to support the child's moving into mainstream education; the characteristics of the administration of the instrument (easy, fast, handy); the possibility to support the intervention planning; the fact that the tool is explicitly designed for children with disabilities. Each tool can be chosen for its specific contents (play preferences, play abilities, type of play, playfulness, etc.) or the specific population it is built for (children with Autism Spectrum Disorder, with visual impairment, with multiple disabilities, etc.).

Twenty-two participants referred to 21 tools that are not play assessment tools. Some of them are not even evaluation instruments (e.g., tablet software applications, educational software, Souding Board, Talking Photo Album). Some are not meant to evaluate play but other child competences (e.g., Raven's Progressive Matrix, the Wechsler's Scales, the Early Learning Accomplishment Profile). Some of these choices of tools depend on the specific professional group of the respondent (for instance, the CAT is a projective instrument useful in psychotherapy). Some other tools assess abilities or psychological dimensions that are involved in play (e.g., the Pediatric Volitional Questionnaire, the Motor-Free Visual Perception Test, the Peabody Developmental Motor Scales, the Symbolic Play Test that allows to evaluate early skills required for language development) or processes that support play (e.g., the Inclusive Classroom Profile).

**Table 4.5.** Tools used for the evaluation of play and reasons for choosing them reported by the respondents (Question #8 and Question #9)

| N and professional group | Tool | Author/s or references | Play assessment | Developmental tool | Reasons for choosing the tool |
|---|---|---|---|---|---|
| 2 OT | Assessment of Ludic Behaviour (ALB) | Ferland (1997) | Yes | | Assesses play behaviour of children with disabilities. Deeper information. Useful to plan intervention. |
| 1 SLT | Autism Diagnostic Interview Revised (ADI-R) | Lord et al. (1994) | Yes (partly) | Yes | Well-defined criteria for play. Norms. |
| 1 T | Behaviour Assessment Battery (BAB) | Kiernan & Jones (1982) | Yes (partly) | | Investigates spontaneous or elicited play. |
| 1 OT | Children's Assessment of Participation and Enjoyment (CAPE)and Preferences for Activities of Children (PAC) | King et al. (2004) | Yes | | Assesses preferences in play and gaols in play. |
| 1 OT | Canadian occupational performance measure (COPM) | Law et al. (2014) | Yes (partly) | | Handy. Encompasses importance, satisfaction and performance judged by the child him/herself. |
| 1 R | Early Childhood Environment Rating Scale Revised (ECERS-R) | *Harms* et al. (2005) | Yes (partly) | | Assesses the educational environment and the play opportunities that it offers. |
| 1 Cou | Evaluation Questionnaire (EQ) | Ferrari et al. (2010) | Yes (partly) | Yes | Easily understood by parents and teaching assistants. Uses the language from the EYFS. Development stages. Provides opportunities to re-assess annually. Provides the information needed for assessment for support for children moving into mainstream education. Is valued by Educational Psychologists. |

| N and professional group | Tool | Author/s or references | Play assessment | Develop-mental tool | Reasons for choosing the tool |
|---|---|---|---|---|---|
| 1 Psy | Early Start Denver Model Curriculum Checklist for Young Children with Autism (EDSM) | Rogers & Dawson (2009) | Yes (partly) | Yes | Is usually used in early intervention. Its efficacy is well documented. |
| 11 OT | Knox Preschool Play Scale (KPPS) | Knox (2008) | Yes | | Gives an idea of level of play. Includes many skills involved in play. Easy to use. Doesn't take a long time to complete. Norm reference. In my workplace it is the approved tool. I had a training for this tool. Reference to developmental age can be helpful in argumentation with health insurances and reports. |
| 1 SE | Perkins Activity and Resource Guide. Check-list on Play (PARG) | Haydt et al. (2004). | Yes (partly) | | Developed for children with visual and multiple disabilities. Informal, simple, fast to use. |
| 1 T | Play History (PH) | Takata (1969) | Yes | | It concerns team games, sports, collections and special interest groups. |
| 1 SE<br>1 Psy | Play Therapy Session Note (PTSN) | Lamanna (2005) | Yes (partly) | | Allows a clear picture of the child's emotional state. Provides guidelines for the further course of therapy with a detailed monitoring. |
| 1 R | Play time/Social time (PTST). Observation tool form | Odom & McConnell (1997) | Yes (partly) | | Guides an observation of play behaviours. |
| 1 Psy | Psychoeducational Profile Revised (PEP-R) and Psychoeducational Profile (PEP-3) | Eric Schopler et al. (2005) | Yes (partly) | Yes | Assesses skills and behaviours of children with autism and communication disabilities. The games are very interesting and give to the child the opportunity to behave freely and autonomously. |

| N and professional group | Tool | Author/s or references | Play assessment | Developmental tool | Reasons for choosing the tool |
|---|---|---|---|---|---|
| 1 Psy<br>1 R | Rosetti Infant Toddler Language Scales (RITLS) | Rossetti (1990) | Yes (partly) | Yes | Useful for very young children (0 – 3yrs). Norm references. Gives ideas for what to observe and what to ask the caregivers. Contributes for the decision of treatment goals. |
| 1 Coo<br>1 OT | Test of Playfulness (ToP) | Skard & Bundy (2008) | Yes | | Evaluates the principal elements that make play possible: I can then work on the missing aspects. Playfulness is very useful for clinical purposes, more than developmental age. |
| 1 SLT | Verbal Behavior Milestones Assessment and Placement Program (VB MAPP) | Sundberg (2008) | Yes (partly) | | Well defined child's social behaviour and social play. |
| 1 T | GCompris ToolKid | Educational software | No | | These games are very suited to see how the student works. |
| 1 T | Breathe, Think, Do with Sesame | Application by Sesame | No | | Teaches children to keep calm and carry on by introducing three possible strategies for working through problems. |
| 1 Psy | Children's Apperception Test (CAT) | Bellak & Bellak (1949) | No | | Helps the child share indirect experiences. |
| 1 OT | Early Learning Accomplishment Profile (E-LAP) | Harding & Peisner-Feinberg (2001) | No | Yes | Organized and comfortable to use. |
| 1 R | Inclusive Classroom Profile (ICP) | Soukakou (2016) | No | | Assesses inclusive educational environments. |

| N and professional group | Tool | Author/s or references | Play assessment | Develop-mental tool | Reasons for choosing the tool |
|---|---|---|---|---|---|
| 1 R | Interaction Analysis; frame analysis | Jordan & Henderson (1995) | No | | Allows a great level analysis of microsociology and meaning construction between interacting participants. |
| 1 SLT | Motor-Free Visual Perception Test-4 (MVPT) | Colarusso, & Hammill (2015) | No | | |
| 1 OT | Peabody Developmental Motor Scales (PDMS) | Folio & Fewell (2000) | No | | Standardized and formal. Is a good complement when using clinical observation. |
| 1 OT | Pediatric Volitional Questionnaire (PVQ) | Basu et al. (2008) | No | | Useful to understand motivational aspects in play. Useful when working with children with severe developmental disabilities. |
| 2 Psy | Progressive Matrix | Raven (1989) | No | Yes | Standardised tool. Easy to apply. |
| | Sounding Board | Application by AbleNet | No | | Studentswith writing disabilities and communication disorders turn it into a story board communicator. |
| 1 Psy<br>1 SLP | Symbolic Play Test (SPT) | Lowe, & Costello (1988) | No | | Helps understanding what is the function of the child in symbolic play. |
| 1 T | Talking Photo Album | | No | | It is an assistive technology communicator: I use it as an interactive storyteller, choice maker, or means of communication. |
| 1 Psy | Wechsler Preschool and Primary Scale of Intelligence | Wechsler (2012) | No | Yes | Helps to assess the abilities. |

| N and professional group | Tool | Author/s or references | Play assessment | Develop-mental tool | Reasons for choosing the tool |
|---|---|---|---|---|---|
| 1 SE | Six thinking Hats | De Bono (2016) | No | | Facilitates the development of critical thinking, improves communication and teamwork, it develops the creativity. Is designed for group work. |
| 1 SE | Creative interventions | Lowenstein (1999) | No | | Comes up with self-awareness and self-confidence. Can be used at individual and group levels. |
| 1 SLT | Non standardized test | Not specified | No | | To evaluate cognitive development. |
| 1 SLT | Non standardised test | Not specified | Not specified | | |
| 1 OT | Batterie d'Évaluation Talbot | Talbot (1993) | Not specified | | Guides clinical observations and uses concrete play instruments (toys, beads…). |
| 1 OT | Developmental scale (personal) | Not specified | Not specified | | Useful to estimate the child's level of play. |
| 1 OT | School AMP | Not specified | Not specified | | It tells me a little about what goes wrong in play and tasks in school that affect play in all settings. |

* Acronyms are defined in Par. 3.3

**Table 4.6.** Methodologies used for the evaluation of play and reason for choosing them reported by the respondents (Question #8 and Question #9)

| N and professional group | Methodology | Dedicated to play | Reason for choosing the tool |
|---|---|---|---|
| 4 OT<br>1 Psy<br>1 SLP | Observation | Yes | Allows assessing the child in natural, environments (classroom, playground, etc.). Gives an objective assessment about child'sability in play. Allows assessing type of play (cognitive and social). Allows seeing cognitive complexity in play depending on contexts. Allows to check the changes in child's play. Can assess play in every child, regardless of his/her abilities. |
| 1 OT | Observation | Yes | Didn't find another tool that is useful for us. |
| 1 SLP | Home Observation | Yes | Shows what toys children prefer, how they play, involve their relatives in play, and what language they use. |
| 1 SLT | Not Specified | Yes | I use methods to integrate play and construct abilities for play, to develop communication and language skills, in children with autism spectrum disorder. |
| 4 SE | Not Specified | Yes | We follow the impact of play through the assessment and evaluation of the achievements of our customers. |
| 1 OT | Free play | Yes | Not Specified. |
| 1 OT | Guided play | Yes | Not Specified. |
| 1 OT | Photo interview | Yes | Tells me what the child wants to achieve and how she/he sees him/herself (competent or incompetent in play). |
| 1 T | Portfolio of photos about the child playing | Yes | I use direct observation through portofolio. I can understand the developmental stage of the child, his/her abilities, interests, to organize my educational activities. |
| 1 OT | I use own list of observations | Not specified | Don't know if there is a good standardized tool. |
| 1 Psy<br>2 OT<br>1 SE<br>1 SLT | Observation | Not specified | Easy to use, easy to observe changes (also emotional changes). Can be used as part of the treatment and intervention. It shows child's abilities, helps identifying limitations and difficulties. |

| N and professional group | Methodology | Dedicated to play | Reason for choosing the tool |
|---|---|---|---|
| 1 OT | Interview with parents and caregivers | Not specified | |
| 1 Psy | Cards with emotions | No | Developmentof the emotions and naming. |
| 1 Psy | Cube “Activities of daily life” | No | Trainingin daily life activities. |
| 1 Psy | Drawing a person | No | Diagnosis of development. |
| 1 SE | Special education diagnostic evaluation with standardized tests | No | General screening and rehabilitation. Assessment of knowledge of body parts. Imitation of movements, reproduction. |
| 1 Psy | Family Scheme with animal figures | No | It helps me to understand better family’s picture through the eyes of the child. |
| 1 T | Logical blocks | No | To check the logical capacity. |
| 1 T | Methods taken from musictherapy | No | I use music as a tool to increase self-esteem and helping children overcome many behaviourally issues. |
| 2 T | Observation | No | I watch the social ability of my students and their cognitive level. |
| 1 T | Role playing | No | To help children overcome issues related to socialization and other issues resulting from limitation in socialization. |
| 1 T | Schemes to dial (such as the human body) | No | |
| 1 T | Puzzle | No | To test the ability of abstraction. |

* Acronyms are defined in Par. 3.3

Seventeen respondents reported about observation as the best method for their activity. Eight of them specifically referred to the observation of play in different contexts, to assess children's ability in play, to assess types of play (cognitive and social), to check changes in child's play as the result of growth or intervention. One participant stated that no tools other than observation have been found to assess play. Seven respondents referred to observation but not enough information was given to clearly understand if it was really used to assess play and two participants explicitly reported about observation to assess social abilities, given out of topic answers. Eight other participants provided responses that seem to be out of topic: cards with emotions, cube "Activities of daily life", drawing a person, methods taken from music therapy are activities that are not strictly related to play; logical blocks and building puzzles are activities related to cognitive performance; finally, family scheme with animal figures is a projective tool used in psychotherapy that is not specifically linked to play.

To report which kind of tools and methodologies are used when play is the main objective of the professional activity, the answers to Question #5 "You use play in your professional activities with children" has been crossed with the type of tools and methodologies used to evaluate play reported in Questions #8 and #9 (see Table 4.7).

When play is the core goal of their activity, the professionals use tools that have been specifically developed for play more often than in the other three situations. In fact, sixty-nine respondents stated to use play as a background for making educational/rehabilitation activities (see Table 4.2): to evaluate play, 22 (31.88%) of them use tools or observation specifically dedicated to play (see Table 4.7). Forty-nine stated to use play as a therapeutic methodology: to evaluate play, 11 (22.45%) of them use tools or observation specifically dedicated to play (see Table 4.7). Forty-six respondents stated to use play to assess the child's competence/ability and/or developmental stage (see Table 4.2): to evaluate play, 14 (29.79%) of them use tools or observation specifically dedicated to play (see Table 4.7). Finally, 35 stated to use play as the objective of their activities, to enable or improve it (see Table 2): to evaluate play, 15 (42.86%) of them use tools or observation specifically dedicated to play (see Table 4.7).

Question #10 was: "Do you recommend this as a good instrument for the practice? Please, explain for each tool". Fifty respondents replied to this question; their answers are reported in Table 8 (containingonly the tools related to play).

**Table 4.7.** Type of tool/methodology reported by professionals who use play in their professional practice

| Tool/ methodology specifically related to play (Questions #8 & #9)* | Question #5: "In your professional activities, you use play" | | | |
|---|---|---|---|---|
| | a) as background for making activities | b) because it is the objective of my activity | c) to assess child's competences | d) as a therapeutic methodology |
| ALB | 2 | | | |
| ADI-R | | 1 | 1 | 1 |
| BAB | | | | |
| CAPE and PAC | 1 | 1 | 1 | 1 |
| COPM | | | | 1 |
| ECERS-R | | 1 | | |
| EDSM | 1 | | | |
| EQ | 1 | | | |
| KPPS | 4 | 4 | 2 | 2 |
| Observation | 5 | 3 | 5 | 1 |
| PARG | 1 | 1 | 1 | 1 |
| PEP-R | 1 | 1 | 1 | 1 |
| PH | 1 | | | |
| PTSN | 1 | | | 1 |
| PTST | | 1 | | |
| RITLS | 2 | | 1 | |
| SPT | 2 | | 1 | |
| ToP | | 1 | | 1 |
| VB MAPP | | 1 | 1 | 1 |
| Total | 22 | 15 | 14 | 11 |

* Acronyms are defined in Table 4.5

**Table 4.8.** Recommendations of instruments for the evaluation of play

| N and professional group* | Tool/ Methodology** | Question #10: "Do you recommend this as a good instrument for the practice?" |
|---|---|---|
| 1 SLT | ADI-R | Yes, to create a plan for play; it gives clear criteria about strengths and weaknesses of the child. It checks for the stereotypical behaviours. |
| 1 OT | ALB | Yes, to elaborate with the parents the objectives of intervention. |
| 1 T | BAB | Yes, it guides in the detection of even small capacity. Good for spontaneous play or through the creation of gambling opportunities. |
| 1 OT | CAPE and PAC | Yes, but only with children who are 8/9 years old. |
| 1 OT | COPM | Subjectived imension of the child. |
| 1 R | ECERS | Assessmentof educational settings that can be used in interventions. |
| 1 Psy | ESDM Rogers | Yes, it is effective in changing the developmental trajectories of children with autism. It has been used in several contexts. It can be used by different professionals (psychologists, motor development therapists, speech therapists, etc.) |
| 1 SLT | The Greenspan floor time*** | It is an integrated method that suggests both evaluation criteria and intervention approaches for developing play skills broadly defined. |
| 11 OT | Knox | Yes but it must be taken into consideration it is not standardized.<br>Yes, it is easy to use and fits various levels of play ability. It gives the age range of each function/ability.<br>It doesn't improve the difficulties of the population of children with ASD.<br>Yes, to communicate with parents when observing the child playing, to estimate his level of play. However, not exhaustive.<br>Yes, good to interact with health insurances.<br>Yes, it is detailed according to activities and age ranges. |
| 1 Cou | LARG | Yes, it is easily understood and has proved to be useful to parents and to a variety of professionals involved in Early Years Education.<br>It shows at a glance the ages and stages of development. |

| N and professional group* | Tool/ Methodology** | Question #10: "Do you recommend this as a good instrument for the practice?" |
|---|---|---|
| 5 OT<br>1 SLP<br>2 Psy | Observation | Yes, it is not invasive, it can also be carried out at a distance, in safe and natural environment.<br>Yes, we are doing well in our school about play and leisure although we are not using a standard tool.<br>Yes, it let us see the child in his/her neutral environment.<br>Yes, it gives an intervention basis.<br>Yes, it makes children at ease and feel relaxed.<br>Yes, it is simple. It helps recognize the improvements.<br>Yes, it is available, it is possible to adapt and use in all situations. |
| 1 T<br>1 Psy | PEP-R | Yes, it supports the behavioural observation of task performance. |
| 1 T | PH | Yes, it reinforces children's inclusivity. |
| 1 R | PTST | Yes, teachers find it acceptable and useful. |
| 1 SE | PARG | Yes, I do recommend it as an informal tool for children with multiple disabilities. |
| 1 R<br>1 Psy | RITLS | Yes, easy to use with direct observation and parents.<br>Yes, it gives a general scale of what is expected in play in each age from 0 to 36 months. It gives ideas about what to observe and what to ask the caregivers to decide the treatment goals. |
| 1 Psy<br>1 SLP | SPT | Yes, it helps understanding what is the function of the child in symbolic play.<br>Yes, it's a standardized test. |
| 1 Coo<br>1 OT | ToP | Yes, playfulness is clinically important. |
| 1 SLT | VB MAPP | Yes, it defines the stages of play. |

*Acronyms are defined in Par. 3.3. **Acronyms are defined in Table 5. **Not indicated as instrument used by the respondent.

Table 8 shows that recommended tools and methodologies share some characteristics:

- they give back a clear description of the child's strengths and weaknesses in play;
- the child's abilities can be compared with developmental stages;
- also thanks to this reason, they can support the intervention planning;
- they can help changing the child's developmental trajectories;
- they can be used by different professionals;
- they can support the communication between the professional and parents, teachers, and health insurances or health systems.

Specifically, observation allows assessing play in several natural and safe contexts, without being invasive and letting the child at ease. Finally, some respondents clearly reported that the standardization of the tool is a key feature, and some showed to be aware that non-standardized tools should be used with caution, given that reliability of their measures is not proved.

## 4.5 General discussion and conclusion

The study presented aimed at investigating the experiences and opinions of practitioners from different fields: special education, occupational therapy, paediatrics, psychology, education, etc., about the existing methodologies and tools for the evaluation of play. The 107 participants who filled out the questionnaire "Evaluation of play in professional practice" reported about 19 different tools and 7 methodologies to evaluate play.

Even if this is a pilot study investigating the professionals' opinions, the findings describe some first interesting features that characterise the recommended tools and methodologies for the evaluation of play in children with disabilities: the possibility to draw a clear description of the child strengths and weaknesses, the possibility to support the intervention planning, the perception that the tools are effective in practice. Respondents also highlighted that tools to evaluate play can better support the interaction with parents, with other professionals taking care of the child and with health systems or insurance, because they provide an objective evaluation of the child's abilities, preferences and improvements. Direct observation, when it is not performed through structured observational tools, can lack objectivity; nevertheless, very often professionals choose this methodology because it can be easily adapted to each child, and it allows evaluating children in natural and safe environments, making them feel comfortable.

Most of the respondents assessed play through non-standardized instruments, but rarely discussed the limitations of non-standardized tools and methodologies that are not evidence-based. This is a potential concern because, as few participants reported, non-standardized tools should be used with caution, given that reliability of the measures they provide is not proved. Another potential concern lies in the fact that some participants referred to use as assessment tools instruments that are not meant to be used for such goal (see Table 5): this is a limitation because, as aforementioned, the evaluation made through these tools is more likely to lack reliability and validity.

It is worth noticing that a large amount of "out of topic" responses have been given to the questions related to the tools and methodologies used to assess play. Half of the reported tools are not meant to assess play, but other children's competences, or abilities, psychological dimensions and processes that can support play. Importantly, some respondents explicitly stated that they are not informed about the existence of tools that can reliably assess play.

This calls to the need to better share the knowledge about the evaluation of play and the tools that have been developed in the past years. This also calls to the need of promoting the approach of "play for the sake of play" (Besio, 2017): this means to spread the awareness that play is not primarily a means to convey the rehabilitation or education of children's competences, but it is a need of the children *per se*, the engine for the children's development and the way to express their preferences, abilities, emotions, etc. Last but not least, play is a right of every child as the Convention on the Rights of the Child (United Nations, 1989) and the Convention on the Rights of Persons with Disabilities (United Nations, 2006) established. As such, play is a right to be supported above all in those children who cannot exercise it because of personal, social, and contextual factors, as it is very likely to happen to children with disabilities.

### 4.5.1 Limitations of the study

The current pilot study was developed to start investigating the view of professionals on the evaluation tools for play in several countries linked to the LUDI Network. The questionnaire has been shared through the Network without strict selection; the number of participants from different countries ended up to be not equal, as well as the number of participants from the professions dealing with play from their different perspectives. Nevertheless, the picture that emerged from the survey showing its complexity and heterogeneity, stressing the necessity to further investigate these issues.

### 4.5.2 Future directions

Further studies could take into account more detailed information about the work experience of the respondents (for instance, type of education, main tasks accomplished in everyday work, etc.) to inform a comparison about the professional groups and to highlight the cultural specificities of each professional group in different countries. A better balance between countries and and professional groups should also be sought.

**Acknowledgements:** We would like to thank all the colleagues who agreed to participate in the study and the colleagues who translated the questionnaires. Persons who helped with the dissemination of the questionnaires: Ana Muntean (Romenia), Anna Andreeva (Bulgaria), Daniela Bulgarelli (Italy), Fani Valsamidou (Greece), Marija Raleva (FYROM), Milica Pejovic-Milovancevic (Serbia), Natasha Ljubomirovic (Serbia), Miodrag Stankovic (Serbia), Mira Tzvetkova (Bulgaria), Rianne Janssen (Netherlands), Silvana Markovska (FYROM), Sylvie Ray-Kaeser (Switzerland), Tamara

Zappaterra (Iaily), Vanya Pavlova (Bulgaria), Vaska Stancheva-Popkostadinova (Bulgria), Vardit Kindler (Israel). The translation of questionnaires was made by: Ana Muntean (Romanian), Daniela Bulgarelli (Italian), Ivanka Shalapatova (Bulgarian), Miodrag Stankovic (Serbian), Silvana Markovska (Macedonian), Sylvie Ray-Kaeser (French), Tatjana Zorcec (Albanian).

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